SUPPLEMENTARY TABLES

Table 1. Right Heart Catheterization Indications

Right heart catheterization indication	Percentage of study population (N = 4,576)
Coronary artery disease	26%
Heart failure	19%
Pulmonary hypertension	14%
Aortic valve disease	9%
None given	8%
Mitral valve disease	5%
Transplant evaluation (non-cardiac)	4%
Transplant evaluation (cardiac)	3%
Atrial septal defect	3%
Cardiomyopathy	2%
Pericardial disease	2%
Congenital heart disease	1%
Miscellaneous	< 4%

Table 2. Hemodynamic Pulmonary Hypertension Classification

Category	Mean PA pressure (mmHg)	PAWP (mmHg)	PVR (Woods Units)	DPG (mmHg)
No PH	< 25	--	---	---
PAH	≥ 25	≤ 15	> 3	---
Ipc-PH	≥ 25	> 15	---	< 7
Cpc-PH	≥ 25	> 15	---	≥ 7
*WHO 3 PH	≥ 25	≤ 15	---	---
PH = pulmonary hypertension, PAH = pulmonary arterial hypertension, Ipc-PH = isolated post-capillary PH, Cpc-PH = combined pre and post-capillary PH, WHO 3 = World Health Organization group 3, PA = pulmonary artery, PAWP = pulmonary artery wedge pressure, PVR = pulmonary vascular resistance, DPG = diastolic pressure gradient. *Presence of pulmonary hypertension, PAWP ≤15mmHg, prevalent chronic obstructive lung disease or interstitial lung disease, and absence of another etiology on manual review.			

Table 3. Subgroup Analysis for Adjusted Association of Risk Factors and Pulmonary Hypertension

Risk factor	PAH (N=564)	Ipc-PH (N=1,456)	Cpc-PH (N=364)	WHO 3 PH (N=214)
AA race	1.47 (1.08-2.02)	0.83 (0.66-1.04)	1.54 (1.12-2.11)	2.01 (1.11-3.64)
Age	0.54 (0.40-0.74)	1.50 (1.20-1.86)	0.63 (0.44-0.90)	0.55 (0.31-1.00)
Male gender	0.44 (0.34-0.57)	1.06 (0.89-1.25)	1.01 (0.76-1.34)	0.47 (0.30-0.75)
Heart failure	2.16 (1.69-2.76)	1.84 (1.55-2.18)	1.61 (1.19-2.16)	0.67 (0.42-1.07)
LV ejection fraction	1.94 (1.64-2.30)	0.63 (0.57-0.70)	0.86 (0.73-1.01)	2.47 (1.68-3.63)
LV hypertrophy	0.91 (0.70-1.18)	1.14 (0.96-1.35)	1.10 (0.83-1.45)	0.74 (0.45-1.21)
Hypertension	0.46 (0.36-0.60)	1.12 (0.89-1.39)	0.82 (0.58-1.16)	1.00 (0.60-1.67)
Diabetes	0.63 (0.49-0.81)	1.40 (1.19-1.64)	1.17 (0.90-1.54)	0.69 (0.44-1.09)
Body mass index	0.59 (0.44-0.78)	1.28 (1.05-1.56)	1.41 (1.03-1.93)	1.27 (0.72-2.25)
Creatinine	1.29 (1.02-1.62)	1.29 (1.12-1.49)	1.38 (1.10-1.74)	0.91 (0.59-1.39)
COPD	--	1.07 (0.86-1.34)	1.39 (0.99-1.95)	26 (16-43)
ILD	--	0.52 (0.36-0.74)	1.79 (1.16-2.75)	35 (22-56)
AA = African-American, LV = left ventricular, COPD = chronic obstructive pulmonary disease, ILD = interstitial lung disease, PAH = pulmonary arterial hypertension, Ipc-PH = isolated post capillary pulmonary hypertension (PH), Cpc-PH = combined pre and post-capillary PH, WHO 3 = World Health Organization group 3. No PAH patients had COPD or ILD, as defined in methods.				

Table 4. Subgroup Analysis for Adjusted Mortality Risk by Pulmonary Hypertension Etiology

Variables	PAH (N=564)	Ipc-PH (N=1,456)	Cpc-PH (N=364)	WHO 3 PH (N=214)
AA race	0.91 (0.64-1.30)	1.12 (0.88-1.43)	1.21 (0.80-1.81)	0.95 (0.51-1.77)
Age	1.52 (1.12-2.06)	1.56 (1.23-1.98)	1.83 (1.16-2.88)	2.78 (1.50-5.15)
Male gender	0.87 (0.65-1.17)	1.16 (0.97-1.39)	1.06 (0.75-1.50)	0.95 (0.61-1.48)
COPD	--	1.48 (1.20-1.83)	1.40 (0.93-2.11)	0.70 (0.43-1.13)
Body mass index	0.64 (0.44-0.93)	0.81 (0.66-0.98)	1.06 (0.75-1.48)	0.61 (0.32-1.17)
Creatinine	1.61 (1.21-2.16)	1.32 (1.14-1.53)	1.35 (1.01-181)	0.96 (0.53-1.71)
AA = African-American, COPD = chronic obstructive pulmonary disease, PAH = pulmonary arterial hypertension, Ipc-PH = isolated post capillary pulmonary hypertension (PH), Cpc-PH = combined pre and post-capillary PH, WHO 3 = World Health Organization group 3. No PAH patients had COPD, as defined in methods				

Table 5. Comparison of Mortality in Patients with Pulmonary Hypertension at 8 Year Follow Up

Characteristic	Survived (N=1,394)	Died (N=1,295)	P-value
Age (years)	57 ± 14	62 ± 14	< 0.001
Male gender, % (n)	48% (669)	52% (667)	0.07
Hypertension, % (n)	81% (1,131)	77% (995)	0.006
Coronary artery disease, % (n)	68% (953)	72% (933)	0.04
Heart failure, % (n)	54% (749)	62% (803)	< 0.001
Atrial fibrillation, % (n)	31% (426)	39% (501)	< 0.001
Chronic obstructive pulmonary disease, % (n)	11% (150)	18% (232)	< 0.001
Interstitial lung disease, % (n)	5% (75)	9% (115)	< 0.001
Obstructive sleep apnea, % (n)	13% (180)	12% (153)	0.39
Systemic lupus erythematous, % (n)	2% (21)	2% (28)	0.20
Scleroderma, % (n)	2% (28)	5% (69)	< 0.001
Diabetes mellitus, % (n)	39% (544)	46% (602)	< 0.001
Obesity, % (n)	50% (620)	40% (378)	< 0.001
Brain natriuretic peptide (pg/mL)	583 ± 862	949 ± 1152	< 0.001
Creatinine (mg/dL)	1.2 ± 1.1	1.5 ± 1.4	< 0.001
Hemoglobin A1c (%)	6.2 ± 1.2	6.3 ± 1.5	0.003
Body mass index (kg/m^2)	31 ± 8	29 ± 7	< 0.001
Low density lipoprotein (mg/dL)	94 ± 40	84 ± 38	< 0.001
High density lipoprotein (mg/dL)	42 ± 17	40 ± 18	0.003
Triglycerides (mg/dL)	150 ± 150	145 ± 151	0.35
Medications:			
Any antihypertensive	74% (1,031)	72% (938)	0.37
Any diuretic	63% (877)	73% (943)	< 0.001
Any anticoagulant	33% (466)	39% (504)	0.003
Any lipid-lowering agent	48% (664)	45% (586)	0.22
[*]Pulmonary hypertension medications:			
Prostacyclins	4% (51)	4% (55)	0.43
Endothelin receptor antagonists	3% (48)	4% (46)	0.88
Phosphodiesterase inhibitors	5% (69)	3% (43)	0.04
Any	9% (124)	9% (115)	0.99
[*]Medications limited to 6 months before date of right heart catheterization			